



IMPROVING COGNITIVE SKILLS FOR ENTREPRENEURIAL PRODUCTIVITY AND GROWTH IN INDONESIA

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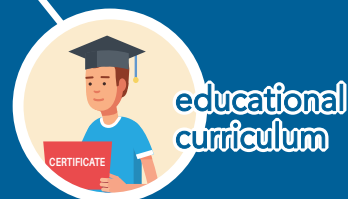
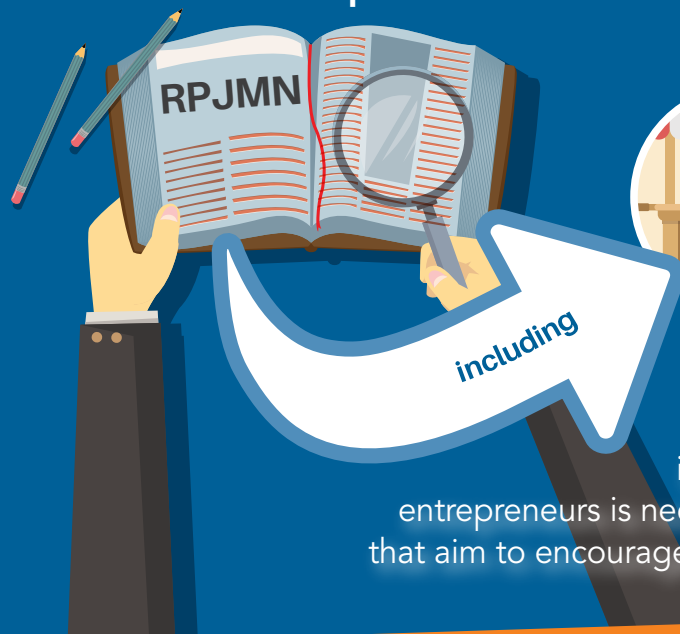
BACKGROUND

Indonesia's **60 million** Small and Medium Enterprises (SMEs) contribute

60% GDP

and occupy 97% workforce

Improving SMEs' competitiveness and productivity is a key element in the government's **Mid-Term Development Plan**.



Understanding the skills and characteristics that are important for success among entrepreneurs is necessary to improve programs that aim to encourage and support entrepreneurs.

RESEARCH OBJECTIVE:

Investigate the returns of two types of cognitive skills (fluid intelligence and crystallized intelligence) of Indonesian non-farm household enterprises on the performance of their businesses.

THE ANALYSIS

FLUID INTELLIGENCE

Capacity to think logically and solve problems in novel situations.

Highly influenced by genetics and biological factors.

Measured by Raven's Progressive Matrices test (shape-matching test) from the IFLS.*



CRYSTALLIZED INTELLIGENCE

Ability to use skills, knowledge and experience.

Acquired through education, experience and interaction with an environment

Measured by mathematic test score in IFLS.*

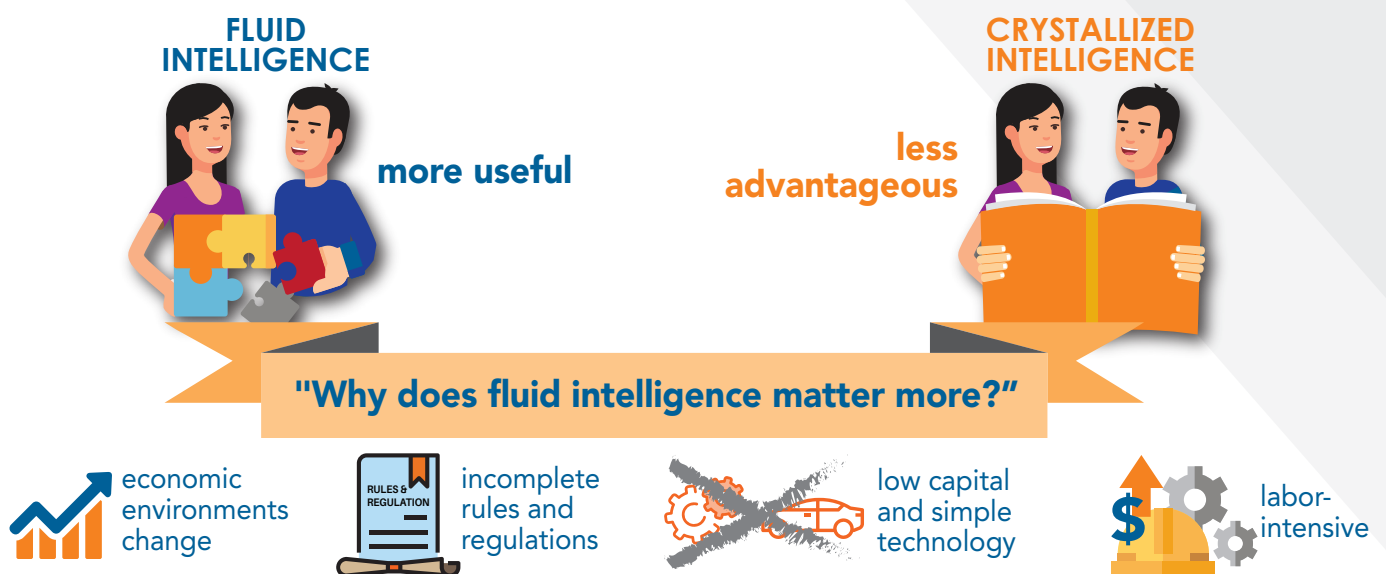


*Indonesian Family Life Survey; data from 2007 and 2014.

KEY FINDINGS

- A one standard deviation increase in fluid intelligence leads to:
 - ↑ **5.7%** increase in profit and
 - ↑ **7%** increase in business value.
- We do not find evidence that crystallized intelligence, once fluid intelligence and education attainment are controlled, has any effect on business performance.
- Crystallized intelligence leads to higher profits only when an entrepreneur is engaged in the sector that is most appropriate given her or his skills.
- We find no evidence of entrepreneurs sorting into sectors based on intelligence or education, presumably due to labor market constraints.

CONCLUSIONS



POLICY MESSAGES

need to invest in improving long-term health outcomes

